

What is claimed is:

1. A communication apparatus comprising:
a line interface operable for communication over a communications
medium;
one or more storage devices operable to store outgoing digital audio
information and store other multi-media data components; and
processing and control circuitry operable under control of a user interface
program, wherein the processing and control circuitry is operable to:
receive stored outgoing digital audio information,
combine the stored outgoing digital audio information with one or
more other stored multi-media data components resulting in combined
outgoing multi-media mail, and
provide the combined outgoing multi-media mail to the line
interface for communication to a remote location.

2. The communication apparatus of claim 1, wherein the communication
apparatus further comprises a voice interface apparatus for use in generating
local analog voice signals from a local user representative of a voice message
and for use in conveying audio signals to the local user, and wherein the
processing and control circuitry is further operable to convert the local analog
voice signals into outgoing digital voice information representative of the voice
message, wherein the outgoing digital voice information representative of the
voice message is provided for storage as the outgoing digital audio information,
and further wherein the processing and control circuitry is operable to combine
the stored outgoing digital voice information representative of the voice message
with one or more of the other stored multi-media data components resulting in
the combined outgoing multi-media mail for communication via the line
interface to a remote location.

3. The communication apparatus of claim 2, wherein the processing and
control circuitry is further operable to compress the outgoing digital voice

information representative of the voice message, wherein the compressed outgoing digital voice information representative of the voice message is provided for storage as the outgoing digital audio information, and further wherein the processing and control circuitry is operable to combine the stored compressed outgoing digital voice information representative of the voice message with one or more of the other stored multi-media data components resulting in the combined outgoing multi-media mail for communication via the line interface to a remote location.

10 4. The communication apparatus of claim 1, wherein the one or more other stored multi-media data components comprise at least one of textual information and graphical information.

15 5. The communication apparatus of claim 4, wherein the graphical information comprises at least one of picture information and video information.

20 6. The communication apparatus of claim 1, wherein the outgoing digital audio information comprises at least one file of outgoing digital audio information.

25 7. The communication apparatus of claim 6, wherein the outgoing digital audio information comprises at least one file of outgoing compressed digital voice information.

8. The communication apparatus of claim 1, wherein the processing and control circuitry is operable to provide a display interface to a user comprising user selectable functions to allow the user to control the creation of the combined outgoing multi-media mail.

30 9. The communication apparatus of claim 8, wherein the user selectable functions comprise at least one of a composing function, a viewing function, an

editing function, a playing function, a recording function, and a deleting function.

10. The communication apparatus of claim 1, wherein the processing and control circuitry is operable to provide a display interface to a user comprising user selectable functions to allow the user to select a destination for the combined outgoing multi-media mail.

11. The communication apparatus of claim 1, wherein the processing and control circuitry is further operable to:

receive incoming multi-media mail comprising incoming digital audio information and one or more other incoming multi-media data components via the line interface; and

store the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail in the one or more storage devices.

12. The communication apparatus of claim 11, wherein the processing and control circuitry is further operable for use in conveying the incoming multi-media mail to a local user.

13. The communication apparatus of claim 12, wherein conveying the incoming multi-media mail to the local user comprises displaying at least one of the one or more other incoming multi-media data components of the incoming multi-media mail to the local user.

14. The communication apparatus of claim 12, wherein conveying the incoming multi-media mail to the local user comprises converting the incoming digital audio information of the incoming multi-media mail to local analog audio signals for conveyance to the local user.

15. The communication apparatus of claim 12, wherein the processing and control circuitry is further operable for use in conveying at least one of the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail to another remote location.

16. The communication apparatus of claim 11, wherein the processing and control circuitry is further operable for use in modifying at least a portion of at least one of the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail.

17. The communication apparatus of claim 11, wherein the one or more other incoming multi-media data components comprise at least one of textual information and graphical information.

18. The communication apparatus of claim 17, wherein the graphical information comprises at least one of picture information and video information.

19. The communication apparatus of claim 11, wherein the incoming digital audio information comprises at least one file of incoming digital audio information.

20. The communication apparatus of claim 11, wherein the incoming digital audio information comprises at least incoming compressed digital voice information.

21. The communication apparatus of claim 11, wherein the processing and control circuitry is operable to provide a display interface to a user to notify the user of the receipt of the incoming multi-media mail.

22. The communication apparatus of claim 11, wherein the processing and control circuitry is operable to provide a display interface to a user comprising

user selectable functions to allow the user to manipulate the received incoming multi-media mail.

23. The communication apparatus of claim 22, wherein the user selectable functions comprise at least one of a forwarding function, a viewing function, an editing function, a playing function, a recording function, a storing function, and a deleting function.

24. The communication apparatus of claim 1, wherein the line interface is operable for full duplex communication over a communication medium.

25. A communication method implemented under control of a user interface program, the method comprising:
providing stored outgoing digital audio information;
combining, under control of a local user via input to the user interface program, the stored outgoing digital audio information with one or more other stored multi-media data components resulting in combined outgoing multi-media mail; and
providing the combined outgoing multi-media mail for communication to a remote location.

26. The communication method of claim 25, wherein providing stored outgoing digital audio information comprises:

generating local analog voice signals from a local user representative of a voice message; and

converting the local analog voice signals into outgoing digital voice information representative of the voice message, wherein the outgoing digital voice information representative of the voice message is combined with one or more of the other stored multi-media data components resulting in the combined outgoing multi-media mail for communication to the remote location.

27. The communication method of claim 26, wherein providing stored outgoing digital audio information further comprises compressing the outgoing digital voice information representative of the voice message, wherein the compressed outgoing digital voice information representative of the voice message is combined with one or more of the other stored multi-media data components resulting in the combined outgoing multi-media mail for communication to the remote location.

28. The communication method of claim 25, wherein the one or more other stored multi-media data components comprise at least one of textual information and graphical information.

29. The communication method of claim 28, wherein the graphical information comprises at least one of picture information and video information.

30. The communication method of claim 25, wherein the outgoing digital audio information comprises at least one file of outgoing digital audio information.

31. The communication method of claim 30, wherein the outgoing digital audio information comprises at least one file of outgoing compressed digital voice information.

32. The communication method of claim 25, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to control the creation of the combined outgoing multi-media mail.

33. The communication method of claim 32, wherein the user selectable functions comprise at least one of a composing function, a viewing function, an editing function, a playing function, a recording function, and a deleting function.

34. The communication method of claim 25, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to select a destination for the combined outgoing multi-media mail.

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35. The communication method of claim 25, wherein the communication method further comprises:

receiving incoming multi-media mail comprising incoming digital audio information and one or more other incoming multi-media data components; and

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storing the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail.

36. The communication method of claim 35, wherein the communication method further comprises conveying the incoming multi-media mail to a local user.

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37. The communication method of claim 36, wherein conveying the incoming multi-media mail to the local user comprises displaying at least one of the one or more other incoming multi-media data components of the incoming multi-media mail to the local user.

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38. The communication method of claim 36, wherein conveying the incoming multi-media mail to the local user comprises converting the incoming digital audio information of the incoming multi-media mail to local analog audio signals for conveyance to the local user.

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39. The communication method of claim 35, wherein the communication method further comprises conveying at least one of the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail to another remote location.

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40. The communication method of claim 35, wherein the communication method further comprises modifying at least a portion of at least one of the incoming digital audio information and the one or more other incoming multi-media data components of the incoming multi-media mail.

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41. The communication method of claim 35, wherein the one or more other incoming multi-media data components comprise at least one of textual information and graphical information.

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42. The communication method of claim 41, wherein the graphical information comprises at least one of picture information and video information.

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43. The communication method of claim 35, wherein the incoming digital audio information comprises at least one file of incoming digital audio information.

44. The communication method of claim 35, wherein the incoming digital audio information comprises at least incoming compressed digital voice information.

45. The communication method of claim 35, wherein the communication method further comprises providing a display interface to a user to notify the user of the receipt of the incoming multi-media mail.

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46. The communication method of claim 35, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to manipulate the received incoming multi-media mail.

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47. The communication method of claim 46, wherein the user selectable functions comprise at least one of a forwarding function, a viewing function, an

editing function, a playing function, a recording function, a storing function, and a deleting function.

48. A communication apparatus comprising:

a line interface operable for communication over a communications medium;

one or more storage devices operable to store one or more outgoing multi-media data components, wherein each of the outgoing multi-media data components comprise one or more types of information, and further wherein the one or more types of information comprise at least one of textual information, graphical information, and audio information; and

processing and control circuitry operable under control of a user interface program, wherein the processing and control circuitry is operable to:

receive two or more stored outgoing multi-media data components, at least one of the two or more stored outgoing multi-media data components comprising a type of information different than another of the two or more stored outgoing multi-media data components,

combine the two or more stored outgoing multi-media data components resulting in combined outgoing multi-media mail, and

provide the combined outgoing multi-media mail to the line interface for communication to a remote location.

49. The communication apparatus of claim 48, wherein the communication apparatus further comprises an audio interface apparatus for use in generating local analog audio signals and for use in conveying audio signals to a local user, and wherein the processing and control circuitry is further operable to convert the local analog audio signals into outgoing digital audio information, wherein the outgoing digital audio information is provided for storage as one of the two or more stored outgoing multi-media data components.

50. The communication apparatus of claim 49, wherein the audio interface apparatus comprises a voice interface apparatus for use in generating local

analog voice signals from a local user and for use in conveying voice signals to the local user, and wherein the processing and control circuitry is further operable to convert the local analog voice signals into outgoing digital voice information, wherein the outgoing digital voice information is provided for storage as one of the two or more stored outgoing multi-media data components.

51. The communication apparatus of claim 49, wherein the processing and control circuitry is further operable to compress the outgoing digital audio information, wherein the compressed outgoing digital audio information is provided for storage as one of the two or more stored outgoing multi-media data components.

52. The communication apparatus of claim 48, wherein the graphical information comprises at least one of picture information and video information.

53. The communication apparatus of claim 48, wherein the processing and control circuitry is operable to provide a display interface to a user comprising user selectable functions to allow the user to control the creation of the combined outgoing multi-media mail.

54. The communication apparatus of claim 53, wherein the user selectable functions comprise at least one of a composing function, a viewing function, an editing function, a playing function, a recording function, and a deleting function.

55. The communication apparatus of claim 48, wherein the processing and control circuitry is operable to provide a display interface to a user comprising user selectable functions to allow the user to select a destination for the combined outgoing multi-media mail.

56. The communication apparatus of claim 48, wherein the processing and control circuitry is further operable to:

receive incoming multi-media mail comprising two or more incoming multi-media data components via the line interface, wherein each of the incoming multi-media data components comprises one or more types of information, wherein the one or more types of information comprise at least one of textual information, graphical information, and audio information, and further wherein at least one of the two or more incoming multi-media data components comprises a type of information different than another of the two or more incoming multi-media data components; and

store the two or more incoming multi-media data components of the incoming multi-media mail in the one or more storage devices.

57. The communication apparatus of claim 56, wherein the processing and control circuitry is further operable for use in conveying the incoming multi-media mail to a local user.

58. The communication apparatus of claim 57, wherein conveying the incoming multi-media mail to the local user comprises displaying at least one of the incoming multi-media data components of the incoming multi-media mail to the local user.

59. The communication apparatus of claim 57, wherein conveying the incoming multi-media mail to the local user comprises converting at least one of the incoming multi-media data components of the incoming multi-media mail to local analog audio signals for conveyance to the local user.

60. The communication apparatus of claim 56, wherein the processing and control circuitry is further operable for use in conveying at least one of the incoming multi-media data components of the incoming multi-media mail to another remote location.

61. The communication apparatus of claim 56, wherein the processing and control circuitry is further operable for use in modifying at least a portion of at

least one of the incoming multi-media data components of the incoming multi-media mail.

62. The communication apparatus of claim 56, wherein the graphical information comprises at least one of picture information and video information.

63. The communication apparatus of claim 56, wherein the audio information comprises at least compressed digital audio information.

64. The communication apparatus of claim 63, wherein the audio information comprises at least compressed digital voice information.

65. The communication apparatus of claim 56, wherein the processing and control circuitry is operable to provide a display interface to a user to notify the user of the receipt of the incoming multi-media mail.

66. The communication apparatus of claim 56, wherein the processing and control circuitry is operable to provide a display interface to a user comprising user selectable functions to allow the user to manipulate the received incoming multi-media mail.

67. The communication apparatus of claim 66, wherein the user selectable functions comprise at least one of a forwarding function, a viewing function, an editing function, a playing function, a recording function, a storing function, and a deleting function.

68. The communication apparatus of claim 48, wherein the line interface is operable for full duplex communication over a communication medium.

69. A communication method implemented under control of a user interface program, the method comprising:

providing one or more outgoing multi-media data components, wherein each of the outgoing multi-media data components comprises one or more types of information, and further wherein the one or more types of information comprise at least one of textual information, graphical information, and audio information;

combining, under control of a local user via input to the user interface program, two or more outgoing multi-media data components resulting in combined outgoing multi-media mail, wherein at least one of the two or more outgoing multi-media data components comprises a type of information different than another of the two or more outgoing multi-media data components; and providing the combined outgoing multi-media mail for communication to a remote location.

70. The communication method of claim 69, wherein providing the one or more outgoing multi-media data components comprises:

generating local analog audio signals; and

converting the local analog audio signals into outgoing digital audio information, wherein the outgoing digital audio information is provided as at least one of the two or more outgoing multi-media data components.

71. The communication method of claim 70, wherein generating local analog audio signals comprises generating local analog voice signals from a local user, and further wherein converting the local analog audio signals into outgoing digital audio information comprises converting the local analog voice signals into outgoing digital voice information, wherein the outgoing digital voice information is provided as at least one of the two or more outgoing multi-media data components.

72. The communication method of claim 70, wherein converting the local analog audio signals into outgoing digital audio information further comprises compressing the outgoing digital audio information, wherein the compressed

outgoing digital audio information is provided as at least one of the two or more outgoing multi-media data components.

73. The communication method of claim 69, wherein the graphical information comprises at least one of picture information and video information.

74. The communication method of claim 69, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to control the creation of the combined outgoing multi-media mail.

75. The communication method of claim 74, wherein the user selectable functions comprise at least one of a composing function, a viewing function, an editing function, a playing function, a recording function, and a deleting function.

76. The communication method of claim 69, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to select a destination for the combined outgoing multi-media mail.

77. The communication method of claim 69, wherein the communication method further comprises:

receiving incoming multi-media mail comprising two or more incoming multi-media data components, wherein each of the incoming multi-media data components comprises one or more types of information, wherein the one or more types of information comprise at least one of textual information, graphical information, and audio information, and further wherein at least one of the two or more incoming multi-media data components comprises a type of information different than another of the two or more incoming multi-media data components; and

storing the two or more incoming multi-media data components of the incoming multi-media mail.

78. The communication method of claim 77, wherein the communication method further comprises conveying the incoming multi-media mail to a local user.

79. The communication method of claim 78, wherein conveying the incoming multi-media mail to the local user comprises displaying at least one of the incoming multi-media data components of the incoming multi-media mail to the local user.

80. The communication method of claim 78, wherein conveying the incoming multi-media mail to the local user comprises converting at least one of the incoming multi-media data components of the incoming multi-media mail to local analog audio signals for conveyance to the local user.

81. The communication method of claim 77, wherein the communication method further comprises conveying at least one of the incoming multi-media data components of the incoming multi-media mail to another remote location.

82. The communication method of claim 77, wherein the communication method further comprises modifying at least a portion of at least one of the incoming multi-media data components of the incoming multi-media mail.

83. The communication method of claim 77, wherein the graphical information comprises at least one of picture information and video information.

84. The communication method of claim 77, wherein the communication method further comprises providing a display interface to a user to notify the user of the receipt of the incoming multi-media mail.

85. The communication method of claim 77, wherein the communication method further comprises providing a display interface to a user comprising user selectable functions to allow the user to manipulate the received incoming multi-media mail.

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86. The communication method of claim 85, wherein the user selectable functions comprise at least one of a forwarding function, a viewing function, an editing function, a playing function, a recording function, a storing function, and a deleting function.

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